REMARKS

The present Amendment amends claims 1, 3-8, 10, 11, 13 and 14, cancels claims 2, 9 and 12 and adds new claims 15-17. Therefore, the present application has pending claims 1, 3-8, 10, 11 and 13-17.

Various amendments were made throughout the specification to correct minor errors grammatical and editorial in nature discovered upon review.

Claims 1-14 stand rejected under 35 USC §102(e) as being unpatentable over Bowman-Amuah (U.S. Patent No. 6,442,547 B1). As indicated above, claims 2, 9 and 12 were canceled. Therefore, this rejection with respect to claims 2, 9 and 12 is rendered moot. This rejection with respect to the remaining claims 1, 3-8, 10, 11, 13 and 14 is traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claims 1, 3-8, 10, 11, 13 and 14 are not taught or suggested by Bowman-Amuah whether taken individually or in combination with any of the other references of record. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to each of the independent claims so as to more clearly recite that the present invention is directed to a communication path control method, a communication service request processing method and a server for performing communication with a user terminal.

According to the present invention as now more clearly recited in the claims, a communication network is provided including first and second communication equipment connected through a plurality of communication networks belonging to different telecommunications companies, a network controller connected to each of

the first and second communication equipment for selectively setting private communication paths on the communication networks, and a server for supplying network control information instructing the network controller to set a private communication path on one of the communication networks. According to the present invention, the network controller selectively supplies communication path control information generated based on the network control information to the first and second communication equipment.

Further, according to the present invention a plurality of information entries are stored, for example, in the assistant server, each information entry being indicative of a definition of a communication path and a communication service provided by each of the telecommunication companies through their communication networks. According to the present invention a communication service request from a user terminal connected to the first and second communication equipment is received by the server. The communication service request designates specifications of a private communication path to be secured for the user terminal. Upon receipt of the communication service request the server retrieves at least one information entry of the stored plurality of information entries, wherein the retrieved one information entry defines a communication path and a communication service that matches the communication service request. The communication path defined by the retrieved information entry is specified as an available path for the user terminal if the communication path can satisfy the communication service request.

However, according to the present invention, a combination of communication paths defined by at least two information entries can also be specified as the

available path if no single information entry matches the communication service request so long as the combination of communication paths satisfies the communication service request. The user terminal is notified of information as to the available path by the server, and network control information generated based on the communication service request and the definition information of the available path from the server is transmitted to the network controller in response to a notification of agreement to the available path from the user terminal.

Therefore, by use of the features of the present invention at least one communication path between the first and second communication equipment is secured as the private communication path to be used.

The above described features of the present invention now more clearly recited in the claims allows for each user terminal to communicate with another user terminal through a private communication path secured instantly as necessary by sending a communication service request to a server connected to a network controller. Further, according to the present invention if no single communication path can be found that satisfies the communication service request, then the server according to the present invention selects a combination of communication paths which together satisfies the communication service request.

The above described features of the present invention now more clearly recited in the claims are not taught or suggested by any of the references of record, particularly Bowman-Amuah, whether taken individually or in combination with each other as suggested by the Examiner.

Bowman-Amuah merely relates to managed network services (MNS) in a hybrid network in which a core network is comprised of a set of different type parallel networks, such as PSTN, SMDS, ATM, Frame-Relay, B/PRI, IP networks, etc. (see col. 1, lines 32-50). Bowman-Amuah seems to select a network that matches with an user request among the parallel networks.

In the Office Action, the Examiner has cited Step 150 of Fig. 1B-1 of Bowman-Amuah as equivalent to the step of "storing information entries of the present invention as recited in the claims. However, Step 150 of Bowman-Amuah collects data relating to usage and events occurring over the hybrid network as described in col. 22, lines 12-20 thereof. Bowman-Amuah does not store information provided by each of the telecommunication companies as entries for later retrieval to define a to be used communication path as recited in the present invention as recited in the claims.

Customer Interface Management process 132 of Bowman-Amuah shown in Fig. 1C has no relation to the step of retrieving at least one information entry defining a communication path and communication service that matches with a communication service request from a user terminal of the present invention as recited in the claims. In Bowman-Amuah at col. 22, lines 23-35 which describe Fig. 1C thereof, there is no teaching or suggestion of any such retrieving step of the present invention as recited in the claims.

By referring to Fig. 1C-1, Bowman-Amuah describes in col. 22, lines 36-44 that a service level agreement is received from a network customer in Step 158, that the service level agreement is stored in Step 160, that inquiries are received from

network customers reflecting occurrences related to the hybrid network in Step 162, and that events are generated based on the customer inquiries and the stored service level agreement in Step 164. These steps relate to reception of customer complaints and how such complaints are processed and as such have absolutely no relation to the step of transmitting of network control information from the server to a network controller of the present invention as recited in the claims.

Further, in the Office Action, the Examiner has cited Steps 180-184 in Fig. 1F-1 as being equivalent to the step of specifying a combination of communication paths as the available path if no single information entry matches the communication service request of the present invention as recited in the claims. However, as described in col. 23, line 65 to col. 24, line 45 of Bowman-Amuah, these steps merely relate to a problem handling process to resolve a problem that may have occurred within the hybrid network. Thus, these steps as taught by Bowman-Amuah have no relation to the above described step of specifying a combination of communication paths as the available communication path if no single communication path matches the communication service request of the present invention as recited in the claims.

It is further submitted that the above described features of the present invention as recited in the claims regarding the step of specifying a combination of communication paths as the available communication path if no single communication path matches the communication service request are not equivalent to the teachings of Bowman-Amuah in col. 22, lines 45-67 thereof regarding the service level agreement (SLA). The SLA as taught by Bowman-Amuah merely

describes an agreement which may have been reached designating the type of service to be provided. However, this type of service to be provided as defined by the SLA has absolutely no relation to the step of specifying a combination of communication paths defined by at least two information entries as the available path if no single information entries matches the communication service request and the combination of communication paths can satisfy the communication service request as in the present invention as recited in the claims.

The above described features of the present invention simply provides an instantaneous proposal of combining paths to satisfy the communication service request when such communication cannot be accomplished on a single path. No such teaching can be found in Bowman-Amuah.

Therefore, based on the above, it is quite clear that the features of the present invention as now more clearly recited in the claims are not taught or suggested by any of the references of record, particularly Bowman-Amuah, whether taken individually or in combination with each other as suggested by the Examiner. Accordingly, reconsideration and withdrawal of the 35 USC §102(e) rejection of claims 1, 3-8, 10, 11, 13 and 14 as being unpatentable over Bowman-Amuah is respectfully requested.

As indicated above, the present Amendment adds new claims 15-17. New claims 15-17 depend from claims 1, 8 and 11 respectively. Therefore, the same arguments presented above with respect to claims 1, 8 and 11 apply as well to new claims 15-17.

Also, new claims 15-17 recite additional features which were not taught or suggested by any of the references of record whether taken individually or in combination with each other. For example, each of these claims recite that each of the information entries includes a communication bandwidth available on the communication path, that the communication service request designates a bandwidth of the private communication path requested by the user terminal and that the server selects, when no single information entry that matches the communication request is found, a combination of communication paths defined by at least two information entries as the available path if the total communication bandwidth available by the combination of communication paths satisfies the requested bandwidth. The above described additional features recited in claims 15-17 are not taught or suggested by Bowman-Amuah whether taken individually or in combination with any of the other references of record.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the reference utilized in the rejection of claims 1-14.

In view of the foregoing amendments and remarks, applicants submit that claims 1, 3-8, 10, 11 and 13-17 are in condition for allowance. Accordingly, early allowance of claims 1, 3-8, 10, 11 and 13-17 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (520.40601X00).

Respectfully submitted,

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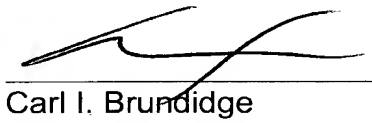

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